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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/835,732	04/11/1997	DEAN A. KLEIN	MPAT.172A	5441

20995 7590 06/17/2003

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EXAMINER

NGUYEN, DUNG T

ART UNIT PAPER NUMBER

2871

DATE MAILED: 06/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
08/835,732

Applicant(s)  
Klein

Examiner  
Dung Nguyen

Art Unit  
2871



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Mar 28, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-9, 11-13, and 15-20 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-9, 11-13, and 15-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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***Response to Amendment***

Applicant's amendment dated 03/28/2003 has been received and entered.

Applicant's arguments file 03/28/2003 have been considered but are moot in view of the new grounds of rejection as follows:.

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-2, 4-5, 7, 11, 15-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiyama et al., U.S. Patent No. 5,548,271.

Regarding claims 1-2, 15-16 and 20, Tsuchiyama et al disclose a data display pager which as understood is a computerized device. In the embodiment as described at column 3 and shown in figures 4 and 3B, the pager comprises a LCD display panel (12); a housing having a reflecting frame (36) and a light conducting plate (38) wherein the frame and the plate are formed integrally with each other; a set of light emitting diodes (12a, 12b) being substantially enclosed by the openings (38a, 38b) of the light conducting plate (38). As a result, the light conducting plate (38) guides light from the light emitting diodes (12a, 12b) to the LCD display panel (12) and simultaneously acts as a protecting element for the LCD display panel. Regarding to the feature of "a LCD housing made in a single light transmissive material" having a reflective coating thereon recited in the claims 1, 16-17 and 20, such a feature is readable from the structure of the

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reflection frame (36) provided in figure 4 by Tsuchiyama et al.. Applicant should be noted that any kind of reflector or reflecting element is a combination of at least two layers in which one layer is a layer of transmissive material and the other is a layer of reflective material and it was decided in the Courts that a formation in one piece an article which has formerly been formed in two pieces and vice verse involves only routine skill in the art. See *Howard v. Detroit stove works*, 150 U.S. 164; *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Regarding claim 17, the pager provided by Tsuchiyama et al as described above meets all of the features concerning the components being used as well as the structural relationship among the components except that Tsuchiyama et al do not clearly set forth a method or set of steps for conducting light as claimed. However, it would have been obvious to one skilled in the art at the time the invention was made to design a method or set forth a sequence of steps including the step of using a set of light emitting diodes (12a, 12b) for generating light, and a step of using a light conducting plate (38) for guiding light from the diodes to illuminate a LCD display panel (12).//

3. Claims 6, 9, 12-13 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiyama et al in view of Applicant's admitted prior art figure 2 as applied to claims 1 and 3 above, and further in view of Habing et al (U.S. Patent No. 5,661,578, of record).

The combined product as provided by Tsuchiyama et al and the prior art as described above meets all of the limitations of the device as claimed in claims 6, 9 and 12-13 except the type of the light emitting elements being used. In other words, while Tsuchiyama et al teach the use of light emitting diodes as light emitting elements, they do not clearly state that other type of light

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emitting element such as a cold cathode fluorescent lamp can be used for generating light.

However, the use of different light emitting elements for providing light in an optical device wherein the light emitting elements can be light emitting diode or cold cathode fluorescent lamp is clearly known to one skilled in the art as disclosed by Habing et al in their LCD device. See Habing et al, column 5, lines 27-34. Thus, it would have been obvious to one skilled in the art at the time the invention was made to use any suitable illuminating elements including a cold cathode fluorescent lamp in lieu of a light emitting diode as suggested by Habing et al for the purpose of providing light to illuminate a LCD display panel in a particular design.

With regard to the method steps as recited in present claims 18 and 19, it would have been obvious to one skilled in the art to utilize the combined product as described above by design a method or set forth a sequence of steps including the step of using a set of light emitting diodes (12a, 12b) for generating light then a step of using a light conducting plate (38) for guiding light from the diodes to illuminate a LCD display panel (12), and making the outer surface of the light conducting plate as a reflecting element for the purpose of reflecting light from the light conducting plate back to the LCD display panel .

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiyama et al in view of Applicant's admitted prior art, figure 2 as applied to claim 4 above and with or without Ohno et al (U.S. Patent No. 5,128,781, of record).

The combined product as described above meets all of the limitations of the device as claimed in claim 8 except the feature concerning the arrangement of the light illuminating element,

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the housing and the LCD display panel. However, an arrangement of the light illuminating element in a gap defined by the housing and the LCD as claimed is merely that of a preferred embodiment and no criticality has been disclosed. The support for this conclusion is found in the present specification in which applicant has taught that the LCD is located in an adjacent manner with respect to the housing while the light emitting elements are coupled to the housing. Such an arrangement is indeed claimed as can be seen in the present claim 5. Further, the arrangement of light emitting element in a central section of a light conducting plate which is separated from a LCD display panel by a gap is clearly suggested in the art as can be seen in the LCD device provided by Ohno et al. See columns 2-3 and figure 1. Thus, absent any showing of criticality, it would have been obvious to one skilled in the art to rearranging the positions of the optical components in an optical device including the arrangement of the light emitting elements in a light conducting plate which is separately located from a LCD as suggested by Ohno et al for the purpose of illuminating the LCD. See also *In re Japikse*, 86 USPQ 70 (CCPA 1950).

### *Conclusion*

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exam. Dung Nguyen whose telephone number is (703) 305-0423. The examiner can normally be reached on Monday to Thursday from 8:00 A.M. to 6:00 P.M.

If attempts to reach the Examiner by telephone are unsuccessful, The Examiner's supervisor, Robert H. Kim can be reached on 703-305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7730 for regular communications and 703-308-7726 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
ROBERT H. KIM  
SUPERVISOR, PATENT EXAMINER  
TECHNICAL CENTER 2000

DN

06/12/2003